This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A complex formed by the chelation of a metal to a zinc finger peptide, the complex having a tertiary structure and wherein said complex can bind to a mammalian nucleic acid, wherein the metal is a radionuclide selected from the group consisting of ^{62}Cu, ^{64}Cu and ^{67}Cu, wherein the zinc finger peptide has a metal binding site comprising amino acid residues selected from the group consisting of four cysteine residues, one histidine and three cysteine residues, and two cysteine and two histidine residues to which the metal is complexed, and wherein the zinc finger peptide comprises the formula:

$$(AA_{1\text{-}10}\text{-}X_1\text{-}AA_{1\text{-}4}\text{-}X_2\text{-}AA_{4\text{-}20}\text{-}X_3\text{-}AA_{1\text{-}5}\text{-}X_4\text{-}AA_{1\text{-}10})n$$

wherein $AA_{1\text{-}10}$ represents one to ten amino acid residues, $AA_{1\text{-}4}$ represents one to four amino acid residues, $AA_{4\text{-}20}$ represents four to twenty amino acid residues, and wherein X_1, X_2, X_3 and X_4 each represent a cysteine or a histidine residue.

2. (Previously Presented) The complex of claim 1 wherein the complex is disposed within an acceptable carrier.

3 - 5. (Canceled)

6. (Previously Presented) A complex formed by the chelation of a metal atom to a zinc finger peptide, the complex having a tertiary structure and wherein said complex can bind to a mammalian nucleic acid, wherein the metal is selected from the group consisting of ^{97}Ru, ^{105}Rh, ^{109}Pd and ^{111}In, wherein the zinc finger peptide has a metal binding site comprising amino acid residues selected from the group consisting of four cysteine residues, one histidine and three cysteine residues, and two cysteine and two histidine residues to which the metal is complexed, and wherein the zinc finger peptide comprises the formula:

$$(AA_{1-10}\text{-}X_1\text{-}AA_{1-4}\text{-}X_2\text{-}AA_{4-20}\text{-}X_3\text{-}AA_{1-5}\text{-}X_4\text{-}AA_{1-10})n$$

wherein AA_{1-10} represents one to ten amino acid residues, AA_{1-4} represents one to four amino acid residues, AA_{4-20} represents four to twenty amino acid residues, and wherein X_1, X_2, X_3 and X_4 each represent a cysteine or a histidine residue.

7. (Previously Presented) A complex formed by the chelation of a radionuclide to a zinc finger peptide, the complex having a tertiary structure and wherein said complex can bind to a mammalian nucleic acid, wherein the radionuclide is selected from the group consisting of ^{186}Re, ^{188}Re, ^{198}Au and

^{199}Au, wherein the zinc finger peptide has a metal binding site comprising amino acid residues selected from the group consisting of four cysteine residues, one histidine and three cysteine residues, and two cysteine and two histidine residues to which the metal is complexed, and wherein the zinc finger peptide comprises the formula:

$$(AA_{1-10}\text{-}X_1\text{-}AA_{1-4}\text{-}X_2\text{-}AA_{4-20}\text{-}X_3\text{-}AA_{1-5}\text{-}X_4\text{-}AA_{1-10})n$$

wherein AA_{1-10} represents one to ten amino acid residues, AA_{1-4} represents one to four amino acid residues, AA_{4-20} represents four to twenty amino acid residues, and wherein X_1, X_2, X_3 and X_4 each represent a cysteine or a histidine residue.

8-20 (Canceled)

21. (Previously Presented) A kit for use in preparing a composition, comprising:

an amount of a zinc finger peptide, the zinc finger peptide having a metal binding site comprising amino acid residues selected from the group consisting of four cysteine residues, one histidine and three cysteine residues, and two cysteine and two histidine residues to which the metal is complexed, and wherein the zinc finger peptide comprises the formula:

$$(AA_{1-10}\text{-}X_1\text{-}AA_{1-4}\text{-}X_2\text{-}AA_{4-20}\text{-}X_3\text{-}AA_{1-5}\text{-}X_4\text{-}AA_{1-10})n$$

wherein AA_{1-10} represents one to ten amino acid residues, AA_{1-4} represents one to four amino acid residues, AA_{4-20} represents four to twenty amino acid residues, and wherein X_1, X_2, X_3 and X_4 each represent a cysteine or a histidine residue;

a metal for complexing to the zinc finger peptide, wherein the metal is a radionuclide selected from the group consisting of ^{62}Cu, ^{64}Cu, ^{67}Cu, ^{97}Ru, ^{105}Rh, ^{109}Pd, ^{111}In, ^{186}Re, ^{188}Re, ^{198}Au, ^{199}Au, ^{203}Pb, ^{211}Pb, ^{212}Bi and ^{99m}Tc; and

a reducing agent for reducing the zinc finger peptide to prepare the zinc finger peptide for complexing with the metal to form a metal-peptide complex having a tertiary structure and wherein said metal-peptide complex can bind to a mammalian nucleic acid.

22 - 24. (Canceled)

25. (Previously Presented) The kit of claim 21 wherein the reducing agent comprises an amount of stannous ion in the form of stannous glucoheptonate, stannous gluconate, stannous phosphonate, stannous chloride or stannous fluoride.

26. (Previously Presented) The complex of claim 6 wherein the complex is disposed within an acceptable carrier.

27. (Previously Presented) The complex of claim 7 wherein the complex is disposed within an acceptable carrier.

28. (Previously Presented) A complex formed by the chelation of a radionuclide to a zinc finger peptide, the complex having a tertiary structure and wherein said complex can bind to a mammalian nucleic acid, wherein the radionuclide is selected from the group consisting of ^{203}Pb, ^{211}Pb, ^{212}Bi and ^{99m}Tc, wherein the zinc finger peptide has a metal binding site comprising amino acid residues selected from the group consisting of four cysteine residues, one histidine and three cysteine residues, and two cysteine and two histidine residues to which the metal is complexed, and wherein the zinc finger peptide comprises the formula:

$$(AA_{1-10}\text{-}X_1\text{-}AA_{1-4}\text{-}X_2\text{-}AA_{4-20}\text{-}X_3\text{-}AA_{1-5}\text{-}X_4\text{-}AA_{1-10})n$$

wherein AA_{1-10} represents one to ten amino acid residues, AA_{1-4} represents one to four amino acid residues, AA_{4-20} represents four to twenty amino acid residues, and wherein X_1, X_2, X_3 and X_4 each represent a cysteine or a histidine residue.

29. (Previously Presented) The complex of claim 28 wherein the complex is disposed within an acceptable carrier.